



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

647.7321
Job Sheet 179264



Part No: 647.7321

Job Qty: 1 ea

Part Name: EC135 T1/P1 Upper Cutter Assembly



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 6/15/18

Job Tracking No:

Due Date: 7/6/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG REV N/C SHEETS 12,13 IPP REV:A 16.12.16 NEW ISSUE DD VERF:JLM

Ship Via:

Bill of Materials

JUN 18 2018

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	7/6/18	7/6/18	0.00	0.00	Start Up Stores/Pkg-1		
110	Packaging	1 pcs	7/6/18	7/6/18	0.00	0.00	Packaging1-1		
120	QC	1 pcs	7/6/18	7/6/18	0.00	0.00	QC4		
130	Packaging	1 pcs	7/6/18	7/6/18	0.00	0.00	Packaging3-1		
135	DC	1 pcs	7/6/18	7/6/18	0.00	0.00	DC		
140	QC21-FG	1 Ea	7/6/18	7/6/18	0.00	0.00	QC21		

Part Op 130 - Identify and pack for shipping as per PPP 647.7321
Descriptions: 135 - Photocopy bluefile & type labels per PPP 647.7321



Container No: S089455



Part: 647.7321

Job No: 179264

Serial No/Batch: S089453

Revision: n/c

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@d-aero.com
www.dartaerospace.com

Date: 07/06/18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Job BOM

Part / Item	Component Name	Quantity	Operation	Container	Exp.
600.0990	Magnabond 6398 Part A Size 112 ml	1 Ea (1 ea)	90-Start up Operation	3029131	11/2018
600.0991	Magnabond 6398 Part B Size 112 ml	1 Ea (1 ea)	90-Start up Operation	3079132	11/2018
600.1012	Sealant PR1425B2 (#654 sem)	1 pcs (1 ea)	90-Start up Operation	3078164	5054101
601.2045	RTV (LOCTITE 598)	1 Ea (1 ea)	90-Start up Operation	5008314	
647.0112	Strut Bracket	2 Ea (2 ea)	90-Start up Operation	5023582	
647.7401	Upper Cutter Assembly	1 Ea (1 ea)	90-Start up Operation	5089327	
647.7701	Strut Assembly	2 Ea (2 ea)	90-Start up Operation	5035528	
647.7818	Mounting Channel	1 Ea (1 ea)	90-Start up Operation	7120939	
647.7819	Cross Bracket Fwd	1 Ea (1 ea)	90-Start up Operation	3028020	
647.7820	Cross Bracket Aft	1 Ea (1 ea)	90-Start up Operation	3074847	508492
647.7821	Eye Bolt Fitting LH	1 Ea (1 ea)	90-Start up Operation	3034480-1	
647.7822	Eye Bolt Fitting RH	1 Ea (1 ea)	90-Start up Operation	5035905	
647.7911	Bracket	2 Ea (2 ea)	90-Start up Operation	3041405	
647.7914	Bracket	1 Ea (1 ea)	90-Start up Operation	7105270	
647.7915	Bracket	1 Ea (1 ea)	90-Start up Operation	5084929	
647.7916	Bracket	2 Ea (2 ea)	90-Start up Operation	5026966	
647.7917	Bracket	1 Ea (1 ea)	90-Start up Operation	7131356	
647.7918	Bracket	1 Ea (1 ea)	90-Start up Operation	7119630	
647.7919	Shim	1 Ea (1 ea)	90-Start up Operation	7157789	
647.8510	Insert	14 Ea (14 ea)	90-Start up Operation	7157789	508495
647.8512	Insert	2 Ea (2 ea)	90-Start up Operation	5026305	
AN3-11A	Bolt	2 Ea (2 ea)	90-Start up Operation	5027721	
AN316C4R	Nut, Jam	2 Ea (2 ea)	90-Start up Operation	5056384	
AN44-12A	Eyebolt	2 Ea (2 ea)	90-Start up Operation	5024839	
AN4C7A	Bolt	2 Ea (2 ea)	90-Start up Operation	5027516	
AN665-34R	Clevis	2 Ea (2 ea)	90-Start up Operation	5014161	
CR3212-5-6	Cherry Rivet	2 Ea (2 ea)	90-Start up Operation	7124259	
CR3213-5-3	Cherry Rivet	16 Ea (16 ea)	90-Start up Operation	5034204	
CR3213-5-4	Cherry Rivet	12 Ea (12 ea)	90-Start up Operation	5060948	
CR3522-4-3	Rivet	8 Ea (8 ea)	90-Start up Operation	7113787-4	
CR3522-5-3	Rivet	8 Ea (8 ea)	90-Start up Operation	5080638	
CR3523-5-3	Rivet	8 Ea (8 ea)	90-Start up Operation	5049827	
MS21042L08	Nut	4 Ea (4 ea)	90-Start up Operation	5044234	
MS21042L3	Nut	29 Ea (29 ea)	90-Start up Operation	5078167	
MS21042L4	Nut	2 Ea (2 ea)	90-Start up Operation	5067848	
MS21042L5	Nut	2 Ea (2 ea)	90-Start up Operation	5058178	
MS24694-S54	Screw	6 Ea (6 ea)	90-Start up Operation	5041925	
MS27039-08-13	Screw	2 Ea (2 ea)	90-Start up Operation	5019320-1	
MS27039-08-16	Screw Pan HD	2 Ea (2 ea)	90-Start up Operation	71130388	
MS27039-1-09	Screw	12 Ea (12 ea)	90-Start up Operation	5017101	
MS27039-1-12	Screw	2 Ea (2 ea)	90-Start up Operation	5049832	
MS27039-1-15	Screw	1 Ea (1 ea)	90-Start up Operation	5038766	
MS27039-1-16	Screw	4 Ea (4 ea)	90-Start up Operation	5049833	
MS27039-1-17	Screw (601.1954)	2 Ea (2 ea)	90-Start up Operation	71127831-4	
NAS1149C0432R	Washer	4 Ea (4 ea)	90-Start up Operation	5050052	
NAS1149F0332P	Washer	60 Ea (60 ea)	90-Start up Operation	5071415	
NAS1149F0532P	Washer	2 Ea (2 ea)	90-Start up Operation	718057-4	
NAS1149FN832P	Washer	8 Ea (8 ea)	90-Start up Operation	71138336-9	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	600.0990	1	19	0
	600.0991	1	18	0
	600.1012	1	29	0
	601.2045	1	19	0
	647.0112	2	90	0
	647.7401	1	0	0
	647.7701	2	6	0
	647.7818	1	9	0
	647.7819	1	7	0
	647.7820	1	0	0
	647.7821	1	18	0
	647.7822	1	14	0
	647.7911	2	10	0
	647.7914	1	12	0
	647.7915	1	10	0
	647.7916	2	9	0
	647.7917	1	5	0
	647.7918	1	11	0
	647.7919	1	4	0
	647.8510	14	0	0
	647.8512	2	11	0
	AN3-11A	2	161	0
	AN316C4R	2	57	0
	AN44-12A	2	7	0
	AN4C7A	2	73	0
	AN665-34R	2	14	0
	CR3212-5-6	2	100	0
	CR3213-5-3	16	155	0
	CR3213-5-4	12	177	0
	CR3522-4-3	8	37	0
	CR3522-5-3	8	96	0
	CR3523-5-3	8	80	0
	MS21042L08	4	1,813	0
	MS21042L3	29	1,588	0
	MS21042L4	2	2,573	0
	MS21042L5	2	587	0
	MS24694-S54	6	121	0
	MS27039-08-13	2	241	0
	MS27039-08-16	2	65	0
	MS27039-1-09	12	150	0
	MS27039-1-12	2	165	0
	MS27039-1-15	1	200	0
	MS27039-1-16	4	231	0
	MS27039-1-17	2	72	0
	NAS1149C0432R	4	2,023	0
	NAS1149F0332P	60	1,710	0
	NAS1149F0532P	2	642	0
	NAS1149FN832P	8	1,429	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐								
		OTHER : _____							



Dart Aerospace Ltd.
1270 Aberdeen St
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Canada

Tel (613) 632-5200

Container View (Active) - Master Unit Containers

Master Unit No	Container No	Part No	Part Name	From Container	Current Location	Quantity
003935	S082050	600.0990	Magnabond 6398 Part A Size 112 ml	S079131	PKG	1
003935	S082049	600.0991	Magnabond 6398 Part B Size 112 ml	S079132	PKG	1
003935	S082048	600.1012	Sealant PR1425B2 (#654 sem)	S077947	CCK017	1
003935	S082046	601.2045	RTV (LOCTITE 598)	S068314	CCK096	1
003935	S082047	647.0112	Strut Bracket	S023582	CCK106	2
003935	S082040	647.7701	Strut Assembly	S035528	CCK114	2
003935	S082039	647.7818	Mounting Channel	F120939	CCK067	1
003935	S082038	647.7819	Cross Bracket Fwd	S028020	CCK115	1
003935	S082034	647.7821	Eye Bolt Fitting LH	S034480-1	CCK115	1
003935	S082033	647.7822	Eye Bolt Fitting RH	S035905	CCK115	1
003935	S041405	647.7911	Bracket	S041403	CCK115	2
003935	S082031	647.7914	Bracket	F165270	CCK115	1
003935	S082030	647.7916	Bracket	S026966	CCK116	2
003935	S082029	647.7917	Bracket	F131356	CCK116	1
003935	S082028	647.7918	Bracket	F119630	CCK116	1
003935	S082027	647.7919	Shim	F157799	CCK116	1
003935	S082021	647.8512	Insert	S026305	CCK116	2
003935	S081997	AN3-11A	Bolt	S027721	ST349	2
003935	S081996	AN316C4R	Nut, Jam	S056384	ST331	2
003935	S081993	AN44-12A	Eyebolt	s024839	ST339	2
003935	S081995	AN4C7A	Bolt	S027516	ST345	2
003935	S014161	AN665-34R	Clevis		ST331	2
003935	S081991	CR3212-5-6	Cherry Rivet	f124259	ST320	2
003935	S081990	CR3213-5-3	Cherry Rivet	s074204	ST319	16
003935	S081988	CR3213-5-4	Cherry Rivet	s066948	ST319	12
003935	S081984	CR3522-4-3	Rivet	fm137597-4	ST318	8
003935	S081981	CR3522-5-3	Rivet	s080638	ST318	8
003935	S081978	CR3523-5-3	Rivet	s049827	ST317	8
003935	S081967	MS21042L08	Nut	s044234	ST303	4
003935	S081968	MS21042L3	Nut	S078167	ST303	29
003935	S081961	MS21042L4	Nut	S067898	ST303	2
003935	S081958	MS21042L5	Nut	s058178	ST303	2
003935	S081960	MS24694-S54	Screw	S041925	ST284	6
003935	S081951	MS27039-08-13	Screw	s019320-1	ST278	2
003935	S081955	MS27039-08-16	Screw Pan HD	fm130388	ST278	2
003935	S081950	MS27039-1-09	Screw	s017101	ST280	12
003935	S081944	MS27039-1-12	Screw	s049832	ST280	2
003935	S081942	MS27039-1-15	Screw	s038766	ST280	1
003935	S081940	MS27039-1-16	Screw	s049833	ST280	4
003935	S081934	MS27039-1-17	Screw (601.1954)	fm127831-4	ST280	2
003935	S081935	NAS1149C0432R	Washer	S050052	ST266	4
003935	S081936	NAS1149F0332P	Washer	S071415	ST262	60
003935	S081938	NAS1149F0532P	Washer	f18057-4-1	GA-Alain	2
003935	S081922	NAS1149FN832P	Washer	fm138336-9	ST263	8

Note: Ad hoc query view of Part.dbo.Container where Container.Active = 1.

Plex 6/23/18 7:07 AM dart.quirion.sonia

REFERENCE ONLY



SUBJECT:
INSTALLATION INSTRUCTIONS
EC135 CCK

REPORT NO:
II135-21
Rev. F
11/01/16

Table 3: Parts List for Figure 3.5 and Figure 3.6

F/N	7301, 7321		7304, 7324		7307, 7327		PART NUMBER	DESCRIPTION
	7302, 7322	7303, 7323	7305, 7325	7306, 7326	7305, 7325	7308, 7328		
1		1					647.7401	UPPER CUTTER ASSY
11		2		2		2	647.7701	STRUT ASSY
14		2		2		2	647.0112	STRUT BRACKET
25	1		1		1		647.7820	CROSS BRACKET FWD
26	1		1		1		647.7818	MOUNTING CHANNEL
40		2		2		2	601.3119	CLEVIS (AN665-34R)
46		2		2		2	601.2826	BOLT (AN3-11A)
48		2		2		2	601.2669	BOLT (AN4C7A)
52		4		4		4	601.2973	LOCKNUT (MS21042-08)
53	15	2	15	2	15	2	601.2943	LOCKNUT (MS21042-3)
54		2		2		2	601.3209	LOCKNUT (MS21042L4)
55		2		2		2	601.3128	NUT (AN316C4R)
56	13		14		14		647.8510	INSERT
61		2		2		2	601.2988	SCREW (MS27039-0813)
62		2		2		2	601.3137	SCREW (MS27039-0816)
64	2	12	2		2		601.3069	SCREW (MS27039-1-09)
66	2		2		2		601.1953	SCREW (MS27039-1-12)
68	2	1	2		2		601.3012	SCREW (MS27039-1-15)
69	4		4		4		601.2637	SCREW (MS27039-1-16)
71	6		5		5		601.2829	SCREW (MS24694S54)
85		8		15		15	601.2764	WASHER (NAS1149FN832P)
86	23	4	17		17		601.1607	WASHER (NAS1149F0332P)
87		4	4		4		601.2638	WASHER (NAS1149F0432P)
95	1						647.7919	SHIM
96		REF		REF		REF	647.5701	GPS Mount Kit
97			1		1		647.7823	Cross Bracket Aft
98			1		1		647.2114	Upper U Channel
99				1			647.1404	Cutter Assy (Upper)
100				5		5	601.3962	Screw (MS27039-0827)
101				5		5	601.1541	Locknut (MS21042L08)
109			2		2		601.2910	Screw (MS27039-1-18)
111						1	647.1405	Cutter Assy (Upper)

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